

**COMBINED DECLARATION AND POWER OF ATTORNEY
FOR UTILITY PATENT APPLICATION**

Attorney's Docket No.

030681-357

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I BELIEVE I AM THE ORIGINAL, FIRST AND SOLE INVENTOR (if only one name is listed below) OR AN ORIGINAL, FIRST AND JOINT INVENTOR (if more than one name is listed below) OF THE SUBJECT MATTER WHICH IS CLAIMED AND FOR WHICH A PATENT IS SOUGHT ON THE INVENTION ENTITLED:

GaN SERIES SURFACE-EMITTING LASER DIODE HAVING SPACER FOR EFFECTIVE DIFFUSION

OF HOLES BETWEEN P-TYPE ELECTRODE AND ACTIVE LAYER, AND METHOD FOR MANUFACTURING
THE SAME

the specification of which

(check one)

☒ is attached hereto;

☐ was filed on _____ as

Application No. _____

and was amended on _____;
(if applicable)

I HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED SPECIFICATION, INCLUDING THE CLAIMS, AS AMENDED BY ANY AMENDMENT REFERRED TO ABOVE;

I ACKNOWLEDGE THE DUTY TO DISCLOSE TO THE OFFICE ALL INFORMATION KNOWN TO ME TO BE MATERIAL TO PATENTABILITY AS DEFINED IN TITLE 37, CODE OF FEDERAL REGULATIONS, Sec. 1.56 (as amended effective March 16, 1992);

I do not know and do not believe the said invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to said application; that said invention was not in public use or on sale in the United States of America more than one year prior to said application; that said invention has not been patented or made the subject of an inventor's certificate issued before the date of said application in any country foreign to the United States of America on any application filed by me or my legal representatives or assigns more than twelve months prior to said application;

I hereby claim foreign priority benefits under Title 35, United States Code Sec. 119 and/or Sec. 365 of any foreign application(s) for patent or inventor's certificate as indicated below and have also identified below any foreign application for patent or inventor's certificate on this invention having a filing date before that of the application(s) on which priority is claimed:

COMBINED DECLARATION AND POWER OF ATTORNEY			Attorney's Docket No. 030681-357
COUNTRY/INTERNATIONAL	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
Rep. of Korea	2001-5065	2 February 2001	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>

I hereby appoint the following attorneys and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:

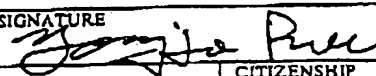
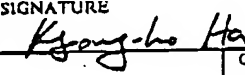
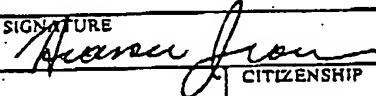
William L. Mathis 17,337 Peter H. Smolka 15,913 Robert S. Swecker 19,885 Platon N. Mandros 22,124 Benton S. Duffen, Jr. 22,030 Joseph R. Magnone 24,239 Norman H. Stepno 22,716 Ronald L. Grudzicki 24,970 Frederick G. Michaud, Jr. 26,003 Alan E. Kopecki 25,813 Regis E. Slunier 26,999	Samuel C. Miller, III 27,360 Ralph L. Freeland, Jr. 16,110 Robert G. Mukai 28,531 George A. Hovanec, Jr. 28,223 James A. LaBarre 28,632 E. Joseph Gess 28,510 R. Danny Huntington 27,903 Eric H. Weisblau 30,505 James W. Peterson 26,057 Teresa Sanck Roa 30,427 Robert E. Krebs 25,885	Robert M. Schulman 31,196 William C. Rowland 30,888 T. Gene Dillahunty 25,423 Patrick C. Keane 32,858 Bruce J. Boggs, Jr. 32,344 William H. Benz 25,952 Peter K. Skiff 31,917 Richard J. McGrath 29,195 Matthew L. Schneider 32,814 Michael O. Savage 32,596 Gerald F. Swiss 30,113 Charles F. Wieland III 33,096
--	--	--

and: _____

Address all correspondence to: **Charles F. Wieland III**
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, Virginia 22313-1404

Address all telephone calls to: **Charles F. Wieland III** at (703) 836-6620.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

FULL NAME OF SOLE OR FIRST INVENTOR Yong-jo Park	SIGNATURE 	DATE 26 January 2002
RESIDENCE Kyungki-do, Rep. of Korea		CITIZENSHIP Korean
POST OFFICE ADDRESS 7-402 Samsung 1-cha Apt., 810-3 Maetan-dong, Paldal-gu Suwon-city, Kyungki-do, Rep. of Korea		
FULL NAME OF SECOND JOINT INVENTOR, IF ANY Kyoung-ho Ha	SIGNATURE 	DATE 26 January 2002
RESIDENCE Seoul, Rep. of Korea		CITIZENSHIP Korean
POST OFFICE ADDRESS 88-12 Nonhyeon-dong, Gangnam-gu Seoul, Rep. of Korea		
FULL NAME OF THIRD JOINT INVENTOR, IF ANY Heon-su Jeon	SIGNATURE 	DATE 26 January 2002
RESIDENCE Kyungki-do, Rep. of Korea		CITIZENSHIP Korean
POST OFFICE ADDRESS 938-501 Myohyang Apt., 1148 Sanbon-dong Gunpo-city, Kyungki-do, Rep. of Korea		

FULL NAME OF FOURTH JOINT INVENTOR, IF ANY Si-hyun Park		SIGNATURE <i>Park Si-hyun</i>		DATE 26 January 2002
RESIDENCE Seoul, Rep. of Korea			CITIZENSHIP Korean	
POST OFFICE ADDRESS 100-324 Bongcheon 6-dong, Gwanak-gu Seoul, Rep. of Korea				
FULL NAME OF FIFTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				
FULL NAME OF SIXTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				
FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				
FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				
FULL NAME OF NINTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				
FULL NAME OF TENTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				
FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				
FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY		SIGNATURE		DATE
RESIDENCE			CITIZENSHIP	
POST OFFICE ADDRESS				

ASSIGNMENT

(JOINT)

THIS ASSIGNMENT, by 1) Yong-jo Park, 2) Kyoung-ho Ha, 3) Reon-su Jeon, and 4) Si-hyun Park, residing at 1) 7-402 Samsung 1-cha Apt., 810-3 Maetan-dong, Paldal-gu, Suwon-city, Kyungki-do, Rep. of Korea, 2) 88-12 Nonhyeon-dong, Gangnam-gu, Seoul, Rep. of Korea, 3) 938-501 Myohyang Apt., 1148 Sanbon-dong, Gunpo-city, Kyungki-do, Rep. of Korea, and 4) 100-324 Bongcheon 6-dong, Gwanak-gu, Seoul, Rep. of Korea

(hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in GaN SERIES SURFACE-EMITTING LASER DIODE HAVING SPACER FOR EFFECTIVE DIFFUSION OF HOLES BETWEEN P-TYPE ELECTRODE AND ACTIVE LAYER, AND METHOD FOR MANUFACTURING THE SAME

set forth in an application for Letters Patent of the United States, [] which is a provisional application to be filed herewith; [] which is a non-provisional application having an oath or declaration executed on even date herewith prior to filing of application; [] bearing Application No. _____, and filed on _____; and

WHEREAS, Samsung Electro-mechanics Co., Ltd., a corporation duly organized under and pursuant to the laws of Rep. of Korea and having its principal place of business at 314 Maetan-dong, Paldal-gu, Suwon-city Kyungki-do, Rep. of Korea (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made:

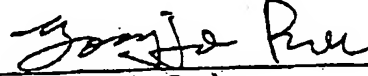
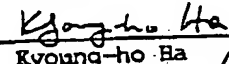
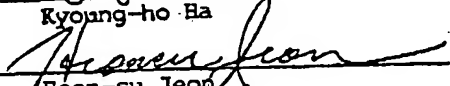
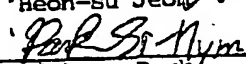
AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including

provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby authorize and request the attorneys of BURNS, DOANE, SWECKER & MATHIS, L.L.P. of Alexandria, Virginia, to insert in the spaces provided above the filing date, application number, and attorney docket number of said application when known.

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date	<u>26 January 2002</u>	Signature of Assignor	<u></u> Yong-jo Park
Date	<u>26 January 2002</u>	Signature of Assignor	<u></u> Kyoung-ho Ha
Date	<u>26 January 2002</u>	Signature of Assignor	<u></u> Heon-su Jeon
Date	<u>26 January 2002</u>	Signature of Assignor	<u></u> Si-hyun Park